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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,736	04/16/2001	Mor Allon	CUC-117	5657

20311 7590 06/03/2005

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EXAMINER

SALTARELLI, DOMINIC D

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/835,736

Applicant(s)

ALLON ET AL

Examiner

Dominic D. Saltarelli

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.
2. Claim 4 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim --cannot depend from any other multiple dependent claim--. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 5, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi et al. (US 2002/0056140 A1) [Oishi] in view of applicant's own disclosure.

Regarding claim 1, Oishi discloses a system to increase the capacity of satellite intermediate frequency signal distribution networks (paragraphs 17-19),

of the type that are comprised of a header which receives the channels with the original signals in QPSK format, processes them (CS signals are received in QPSK form and converted to 64-QAM, paragraph 41) and sends them to a converter (fig. 4, CS tuner 13) which sends its output signals to the user's receiver (fig. 4, television 11), characterized in that the header some of the channels are processed at QAM form (CS signals are received in QAM form, paragraphs 39-40 and 52).

Oishi fails to disclose the converter converts the QAM modulation format into QPSK modulation format.

However, applicant's own disclosure states that it is known to convert signals back into the original form prior to IF modulation so that they may be processed by conventional receiver equipment (applicant's disclosure describes a reverse group converter CPI1 which returns signals to their original form so that they may be processed by user receiver IRD1, page 3, lines 25-27).

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Oishi to convert the QAM modulation format back into QPSK modulation format at the converter, for the benefit of enabling a conventional satellite receiver to process the received signals.

Regarding claim 2, Oishi discloses the system of claim 1, wherein the converter has a tuner (fig. 4, CS tuner 13) which selects the UHF frequency

margin where the processor channels with QAM format to be processed are found (paragraph 68), and converts them into a lower frequency, which can be treated by a QAM demodulator obtaining at the output the original basic band signal which is processed by a QPSK encoder which supplies the I and Q signals necessary for a later modulator which generates a radiofrequency signal in a low value frequency modulated in QPSK format which is delivered to an agile converter which transfers it to the frequency margin included within the FIS (these are the steps for reconvertng the QAM modulated signals back into their original QPSK format as per the modification made above regarding claim 1) and whose output supplies a selector switch which selects, by means of a control microprocessor , the origin of signals to be presented at the output of the selector switch (within television receiver 11, users input signals which control the switching between the Video(1), Video(2), and RF input terminals, paragraphs 55-56) which in one position selects the signals in QPSK format which originally belonged to the processed channels (the Video(2) selection, which carries the CS signals which were converted to QAM) and in another position selection the original signals not processed in QAM format (the Video(1) selection, which carries the BS signals which were never converted to QAM).

Regarding claim 5, Oishi discloses the system of claim 2, wherein the converter has a filter at whose auxiliary output the terrestrial diffusion analog

signals are available (distributor circuit 42 provides the RF output which provides the terrestrial broadcast signals to the television receiver, paragraph 67).

Regarding claims 6 and 7, Oishi discloses the system of claim 2, wherein the control microprocessor is governed in turn by the user receiver through a communications port (users select input sources, paragraph 56, and channels for display, paragraphs 81-83). Oishi fails to disclose the communications port is an RS-232 port.

Examiner takes official notice that RS-232 ports are an industry standardized I/O port for transferring data, and is especially suitable for low bandwidth command data.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Oishi to utilize an RS-232 port, an industry standardized I/O communications port.

Conclusion

5. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Art Unit: 2611

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

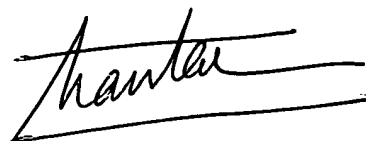
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D. Saltarelli whose telephone number is (571) 272-7302. The examiner can normally be reached on Monday - Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dominic Saltarelli
Patent Examiner
Art Unit 2611

DS

A handwritten signature in black ink, appearing to read 'Hai Tran', written over a horizontal line.

**HAI TRAN
PRIMARY EXAMINER**